ESSENTIAL COMPONENTS

Essential Components of a Quality Assurance Program

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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate and that the appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: _____

Daniel J. Dow

Abstract

The problem was the Medical Director for the Town of Natick Fire Department had required a quality assurance program be developed. Without a quality assurance program, the department would lose the ability to operate under the Natick Medical Director's license. The research purpose was to determine what essential components are contained within a quality assurance program. Research questions included what do other fire department and other medical directors feel are essential components of quality assurance program. In addition non fire department agencies were also researched to see what essential components are included in their quality assurance program. A descriptive research method was utilized. Research included interviews, participation in training sessions on quality assurance and attendance of meetings with medical control doctors from the Metropolitan Boston Emergency Medical Services Council. The research resulted in the following four recommendations for inclusion in a quality assurance program; first the program should be prospective which includes a comprehensive training entity. Secondly the program needs to be concurrent so that review is taking place during the provisions of service. Next the program should be retrospective so the program administrator can look back on services that have been previously rendered. Finally, and most importantly, the program should include a reporting and feedback element. So that quantifiable standards may be set, measured and achieved.

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Essential Components of a Quality Assurance Program

Introduction

The problem is the Medical Director for the Town of Natick Fire Department has required a quality assurance (QA) program be developed. Without a quality assurance program, the department will lose the ability to operate under the Natick Medical Director's license. Quality Assurance has been defined as any systematic process of checking to see whether a product of service being developed is meeting specified requirements. The purpose of this applied research project is to determine what essential components are contained within a quality assurance program. A well-planned and executed QA program is said to increase customer confidence and a company's credibility, to improve work processes and efficiency. Implementing and existing QA program (with proven success) from another organization in the Natick Fire Department would be the quickest and most efficient way of achieving required components and outcomes. The author took the opportunity to research what essential components go into a QA program and decided that before any QA program be developed, it should be determined what essential components have been shown to have lead to other successful QA programs. In order to accomplish this, the following research questions were developed: What do other fire departments feel are the essential components of a QA program? What do medical directors (within and outside of Natick) feel are the essential components of a QA program? What do non-fire department agencies feel are the essential components of a QA program? Using a descriptive research method, this Applied Research Project will look at what essential components go into a successful QA program. Much of the information used came from review of different QA programs both

in the public and private sector as well as attending several training programs related to quality assurance. The author also attended quarterly meetings of the Metropolitan Boston Emergency Medical Services Council whose members include Medical Directors from the greater Boston area. Literature review showed that Quality Assurance was initially introduce during World War II, and along with quality improvement programs, has steadily become industry standard. The end result showed that four major components should be included in a QA program: First the program should be prospective which includes a comprehensive training entity. Secondly the program needs to be concurrent so that review is taking place during the provisions of service. Next the program should be retrospective so the program administrator can look back on services that have been previously rendered. Finally, and most importantly, the program should include a reporting and feedback element. So that quantifiable standards may be set, measured and achieved. With these components as a guide the Natick Fire Department could set out on a course to develop and implement a successful QA program which will serve as a model for others to follow.

<div align="center">Background and Significance</div>

The Town of Natick is a suburban community, first settled in 1651 and incorporated in 1781. It is located 15 miles west of the City of Boston. The town is home to companies such as Boston Scientific and Mathworks in addition to a large retail shopping center. The U.S. Army Soldier Systems Command also calls Natick home. The town is 16.1 square miles and the 2010 census put the population at 33,006, which increases to over 100,000 with daytime shoppers and employment.

The Natick Fire Department (NFD) was formed in 1844. In 1924 Leonard Morse Hospital located in Natick retired their horse driven ambulance and purchased a motor driven ambulance to be manned by full time Natick firefighters. Today the NFD has eighty five career personnel that work out of four fire stations strategically located throughout the town. The minimum staffing per shift is seventeen firefighters, who staff four engine companies, one ladder company, two Advanced Life Support ambulances at the paramedic level and one command car.

To say that the Natick Fire Department has never had a quality assurance program would be untrue; the town simply has not implemented a defined program with guidelines and standards. Prior to 2010, all patient care reports for transports to a hospital facility conducted by Natick Fire Emergency Medical Personnel were processed on a three-page carbon copy medical trip sheet form. The pages were colored with the white page going to the fire department, the yellow page going to the medical billing company (a sub-contractor employed by the fire department) and the pink page staying with the patient at the hospital to be entered into the patient records. The fire department copies were kept for review by the Administrative Deputy Chief, together along with the Natick Fire Department's Advance Life Support Coordinator. These individuals would occasionally review these forms for any inaccuracies which may have occurred. There was no formal department mandate or policy that required these individuals to conduct this review-it was simply documentation to be pulled when a possible discrepancy was brought to their attention and a review of the medical trip sheet was needed.

In January 2010, the NFD transitioned to an electronic patient care reporting (EPCR) system. The Town of Natick contracted with Professional Ambulance to be the

provider of this service. In addition Professional Ambulance also provides all billing services for the NFD. Professional Ambulance provided the NFD with three Panasonic Toughbook® lap-top computers in which to complete patient care reports. After each ambulance call, the personnel assigned to the ambulance are required to complete an EPCR. Once complete, the EPCR is uploaded to a server at Professional Ambulance and a copy is then sent to the hospital that received the patient. Currently no copy is sent to the NFD for review. The NFD leadership does have the ability to access reports and/or data online should the need arise. Since the transition to EPCR in 2010, the process of periodically reviewing the paper medical trip sheets has become obsolete.

In the spring of 2012 Emily Groom MD, was appointed as the new Medical Control Physician for the Natick Fire Department. One of Dr. Groom's requirements as the new Medical Control Physician for the NFD was to mandate that a quality assurance program be established.

The responsibility for accomplishing the NFD QA program falls on the Administrative Deputy Chief who serves as the Emergency Medical Coordinator for the Town of Natick Fire Department. The author having just been appointed to this position was now charged with designing and implementing a QA program within a one year period. Additionally, the author had recently completed his 4th and final year class in the Executive Fire Officer Program at the National Fire Academy entitled Executive Leadership (EL). Instead of just adopting and implementing a generic QA program from another fire department, the decision was made to research what essential components are necessary for a successful QA program. The decision also dovetailed into one of the five

United States Fire Administrations strategic goals to improve the fire and emergency services' professional status.

<div align="center">Literature Review</div>

The author's literature review discovered that many articles have been written about quality assurance in many different industries. In his article *Heroes in the History of Quality Assurance and Quality Control*, Hammoudi (2012) refers to four pioneers behind today's food and pharmaceutical testing. First he speaks of Fredrick Winslow Taylor who promoted the application of scientific principles to industrial management a legacy that endures today in the quality assurance and quality control practices that guide food and pharmaceutical testing. Next he discusses Walter Shewhart, who worked in the Inspection Engineering Department of the Western Electric Company; their quality assurance was focused exclusively on inspecting the end product. Shewhart introduced a new goal trying to minimize defect during the manufacturing process. Hammoudi goes on to discuss William Deming, who considered the application of statistics to quality control and is considered the father of the quality evolution. Lastly Joseph Duran developed a theory that a resistance to new ideas was often a cause of quality assurance and quality control problems.

Ferola (2005) states that from a quality assurance program a fire department must be able to answer the following questions. Are response times within acceptable ranges? Is paperwork being filled out completely and correctly? Are patients receiving adequate treatment based on their signs and symptoms and the crew's assessment? Are crews following department protocol and standing orders? Are potential performance issues with any particular employee or perhaps the entire division? While mentioning that

quality assurance is important in every industry, Ferola says Emergency Medical Services must use a four pronged approach to quality assurance, with those being prospective, concurrent, retrospective and reporting and feedback. Prospective should look at the organization to prevent future problems. Concurrent should perform evaluations that identify concerns during patient care. Retrospective identifies known problems to prevent their recurrence. Reporting or feedback creates mechanisms that provide outcome data on EMS performance.

Silimperi (2002) in a position paper *A framework for institutionalizing quality assurance,* introduces the framework for a QA program which comes from the experience of assisting developing countries design and implement QA for their healthcare systems. The framework depicts the essential components necessary for the institutionalization for QA within an organization and provides practical information on how to facilitate the process necessary to reach this goal. There are three core quality assurance activities. Defining Quality, Improving Quality and Measuring Quality. No core activity is sufficient on its own to improve and maintain quality; it is the interaction and synergy of all three that facilitate sustainable improvements.

Throughout history the successful outcome of a product design or service appears to be the reason for quality assurance. Many aspects seem to fit it the overall theme of QA. One such aspect is ongoing training. When we talk of training in pre-hospital care Kresky (1986) makes the point that in many instances the evaluation of paramedics and emergency medical technicians ends with the training program. The assumption is made that ongoing quality assurance is unnecessary once a skill is obtained.

The training aspect comes into view in another article by Sessions (2002) who mentions that in Gainesville Florida Fire Rescue Department the training personnel conduct monthly reviews of high-priority topics such as advanced airway management, cardiac arrest, acute coronary emergencies, trauma, and refusals of care and repeat 911 callers within a 48-hour period. This process not only identifies training needs, but also the potential for treatment modifications. In addition exemplary job performance can be recognized and subsequently rewarded.

While the driving force behind getting a QA program online in the NFD was the Medical Director's mandate Evans (2012) points out that in 2012 the U.S. Department of Health and Human Services plans to release roughly $1 Billion for EMS projects that support non-traditional delivery methodologies. As a result, a much greater emphasis will be placed on outcomes and measurable results.

While conducting the literature review the author identify QA programs that were developed for organizations outside of the United States. In the paper discussing Occupational Therapists of Ontario, Canada (2009) the article talks about how the Ministry of Health and Long-Term care had set legislation for quality assurance programs of health care colleges. The Ministry mandates that a QA program must include the following: Continuing education or professional development designed to promote continuing competencies and quality improvement amongst members, followed by addressing changes in the practice environment and incorporating standards of practice and advances in technology. Lastly any changes made to entry to practice competencies and other relevant issues in the discretion of the council. In addition self peer and practice

assessments and a mechanism for the college to monitor members' participation in, and compliance with the quality assurance program.

During the literature review, a repetition of three to four core QA components was evident. One literature piece out of the State of Wisconsin, however, had a total of nine steps that outlined the components necessary for a QA program. The Wisconsin EMS Medical Director Course (2012) listed assign responsibility, describe the scope of the service, identify aspects of care that are high-risk, frequent or problem prone, develop indicators and measurable components, collect and organize data, analyze data, create and action plan, evaluate the effectiveness of action and communicate relevant information. As the nine steps need for a QA program

The author was looking for a simplistic explanation between quality assurance and quality improvement (QI). In the article Practice QA not QI Mateo-Mih (2008) states the fundamental difference is that QI seeks to measure performance and fix problems while QA seeks to anticipate and prevent problems.

To summarize the literature review, the article by Hammoudi (2012) highlights that quality assurance is found in industries such as food production and pharmaceuticals and that the process of quality assurance has been studied by many individuals over the last 150 years. This showed that quality assurance is standard for many industries and that the process has been vetted out over many years. Ferola (2005) talked about how a quality assurance program should work in a fire department, listing five questions that should be asked in a QA program. In addition mentioning that a QA should be prospective, concurrent, and retrospective and include reporting and feedback these four components started to lead the author in a direction that would start to focus on these

items as essential. In his article Silimperi (2002) lists three core quality assurance activities and states that synergy between all three is the way to sustainable improvements. Bringing to light the fact that you may be able to come up with the essential components for a QA program, but there must be synergy between them for any sustainable improvement to occur. Training seemed to be an ongoing theme throughout the literature review. Kresky (2002) makes note that an assumption is made when evaluating paramedics and emergency medical technicians that ongoing quality assurance is unnecessary, once a skill has been obtained. This particular idea resonated strongly with the author as he progressed with the development of essential building blocks to an effective QA program, noting that incorrect assumptions can be extremely damaging. Additionally, the author needs to find out exactly what assumptions are being made in his own department in regards to quality assurance. The training theme was continued by Sessions (2002). The process utilized by the Gainesville, Florida Fire Rescue Department includes monthly review of high-priority topics which identify training needs, but also can recognize exemplary job performances. This concept was of particular interest to the author because he had never identified QA as a tool to recognize outstanding job performance. The fact that training needs to be an essential component of a QA program has become evident. In today's economy, seeking money from sources beyond the local tax base has become standard place. Evans (2012) mentions that plans are in the works for roughly $1 billion for EMS projects that support non-traditional methods of delivery. Although the driving force behind researching essential components of a QA system was a mandate from the Medical Director, the possibility of attaining grant funding is something that should not be overlooked when developing a program. Evans (2012)

further states that greater emphasis will be placed on outcomes and measurable results, which are directly linked to quality assurance programs. The College of Occupational Therapists of Ontario, Canada (2009) showed what is doing when it comes to Quality Assurance. The article addresses the training issue, but also mentions that a program should include advances in technology as a component of the program. This was another concept not yet considered by the author. Module number eight of the Wisconsin EMS Medical Director Course (2012) mentions nine steps that are necessary for a QA plan. One of the steps in the plan involves collecting and organizing data. Organizing and collecting data should be considered as an essential component and one in which the Natick Fire Department ambulance billing company can assist with, once a program has been established. One of the questions the author had while conducting the literature review is what is the difference between "quality assurance" and "quality inspection". Mateo-Mih (2008) provided clarification by defining "quality inspection" as seeking measure performance; "quality assurance" seeks to anticipate and prevent problems. This will be valuable information as the author develops the essential components of a QA program within the NFD. The author wants to assure that the components he is researching are for a QA program and not a quality inspection program.

<div align="center">Procedures</div>

Procedures that were utilized to complete this applied research project were accomplished through a series of steps, beginning with a thorough literature review at the National Fire Academy's Learning Research Center. Online literature review was also conducted with the author using the web-based search engine *Google* as a starting source. Typing in words and phrases such as "quality assurance", "essential components of

quality assurance" and "quality assurance programs" led the author to numerous articles and journal publications on subject matter at hand. The author determined that attending meetings with medical directors and participating in quality assurance courses and symposiums would be the best way to come to a consensus of what the essential components of a quality assurance program are.

The author attended the Power Phone Total Response Quality Assurance Program. The instructor was Ms. Debra King of Power Phone which is the vendor the Town of Natick had contracted with to provide a system for Emergency Medical Dispatch. The author is the Natick Fire Department liaison to the Natick Public Safety Dispatch Center and, as such, is a member of the Quality Assurance Team for Emergency Medical Dispatch. The program was eight-hours in length and covered such topics as: Introduction to Quality Assurance, QA program development, implementing the QA program and evaluating the QA program.

The author attended the September 2012 meeting of the Metropolitan Boston Emergency Medical Services Council Medical Control Committees meeting. Items on the agenda included cervical spine clearance and selective immobilization and administration of pediatric nasal narcan.

The author attending a meeting at the headquarters of Professional Ambulance in Cambridge, Massachusetts. The purpose of this meeting was to introduce the Natick Fire Department Medical Director to the staff at Professional Ambulance who are responsible for collecting all the electronic patient care reports and disturbing them electronically to the receiving hospitals. During this meeting the continuing quality improvement program at professional ambulance was discussed at length.

The author spoke with Emily Groom, MD of Metrowest Medical Center. Dr. Groom was asked what components she would consider essential to a quality assurance program.

The author spoke with Mr. Bill Mergendahl who is the president of Professional Ambulance based in Cambridge, Massachusetts. Mr. Mergendahl was asked how the quality assurance program at Professional Ambulance Company was conducted and what he felt was the essential components of that program.

The author spoke with Ms. Keri Cook who is the Director of CQI at Professional Ambulance based in Cambridge, Massachusetts. Ms. Cook was asked how the continuing quality improvement program at Professional Ambulance Company was conducted and what she felt were the essential components of that program.

The author attended the Massachusetts Communication Supervisor Association Quality Assurance and Quality Improvement Symposium. Components needed for a quality assurance program in a public safety dispatch center were discussed.

 The author spoke with Dr. Suzanne Wedel who is the Executive Director for Boston Med-Flight, a critical care transport service transporting patients throughout New England. Dr. Wedel was asked about what she felt were necessary for and effective quality assurance program.

While participating in the quality assurance courses and symposiums, the author faced no limitations; the Town of Natick Fire Department paid for all expenses related to the courses. Acceptance into the programs and the symposium was achieved by completing online registrations. There were some minor limitations in trying to conduct the meeting with Professional Ambulance and Dr. Groom, due to scheduling conflicts,

but those conflicts were eventually resolved. During the interviews that were conducted the author faced no limitations. All parties were cooperative and the author felt their contributions were honest and helpful.

Results

During attendance at Power Phone Total Response Quality Assurance Program the author was instructed by Debra King. Ms. King works for Power Phone and is an instructor in the company's Quality Assurance Training Division. This eight-hour program covered three modules directly related to the author's research. Module One was an introduction to QA. This section illustrated and discussed the definitions and concepts related to QA, the obstacles to establishing a QA program, the reasons for implementing a QA program and the three-step process to quality assurance and implementation. In this module QA was defined as, "any systematic process of checking to see whether the service being developed or delivered is meeting specified requirements". It was also stated that QA was initially developed during World War II when munitions were inspected and tested for any defects after they were made. During this module three-steps to a quality process were discussed. Step-one defines quality with the definition stating the QA relies on a strict definition of what is acceptable and what is not acceptable in the delivery of your service. Step- two is measuring quality which Power Phone defines as, "the ability to measure the quality of the service being directly linked to achieving the consistent results". Module Two was QA program development. This module covered the four standard phases of development for a QA program. Power Phone identifies those as being *initiation, planning, execution and closeout*. The author took note that what Power Phone was calling "phases" could actually be termed or

considered "essential components". In the *initiation* phase, stakeholders need to be identified and standards need to be defined. During *planning* resources need to be assigned and a reporting structure needs to be created. The *execution* phase is where progress is monitored and in the *closeout* phase program implementation occurs. Utilizing these phases and terming them "essential components" seemed to be a reasonable solution. Module Three was implementing the QA program. This module focused on ensuring compliance, measuring protocol effectiveness, standardizing the quality of care, ensuring scene safety, reducing litigation risk and promoting continuous improvement.

During attendance of the September 7th, 2012 meeting of Metropolitan Boston Emergency Medical Services Council Medical Control Committee meeting, the author listened to a discussion on how to selectively clear cervical spine injuries. During the discussion, quality assurance was brought up about how to ensure that any protocol changes that were made were being followed out in the communities. Most of the discussion focused on three areas which the author took as the "essential components". First was the QA program must be prospective in nature which includes the training portions. Secondly the program must be concurrent meaning review must take place during the provision of service. Third the program must be retrospective looking back on the services that have been previously rendered. Also discussed was a protocol change to the administration of pediatric narcan. Again QA, was brought up and the discussion focused around prospective, concurrent and retrospective as ways to monitor the success for failure of the protocol change.

The author attending a meeting on October 26th, 2012 at Professional Ambulance Company in Cambridge, Massachusetts. In attendance at this meeting were Natick Fire Chief James Sheridan, President and CEO of Professional Ambulance Mr. Bill Mergendahl, Natick Medical Control Physician Emily Groom, MD and Director of Continuing Quality Improvement (CQI) at Professional Ambulance, Ms. Keri Cook. This meeting centered around getting the information needed for a QA program at Natick Fire from the computer servers at Professional Ambulances back to Dr. Groom and the Natick Fire Department Emergency Medical Services Coordinator. There was discussion around QA and what components the attendees thought were important to the program. Most of the discussion focused around training and feedback. Emphasize was placed, that when feedback is given it should not always be in a negative format. Individuals should be recognized for the outstanding performance as well.

During an interview with Dr. Emily Groom (personal communication September 7th, 2012), Dr. Groom stated that the she would consider essential to QA program would be training, real time review of actions of the field paramedics and review of select transports which fit into a defined criteria such as cardiac arrest and trauma.

In a personal interview with Mr. Bill Mergendahl (personal communication September 20th, 2012) Mergendahl stated the QA program at Professional Ambulance was handled by a director of Continuing Quality Improvement. This Director is responsible for reviewing all medical calls that Professional Ambulance responds to whether or not there was a transport. Mergendahl stated that if he were to define the essential of a QA program, he would consider them to be prospective, concurrent and retrospective. Professional Ambulance has earmarked a substantial budget to creating a

realistic training environment which they call their "Simulation Laboratory". This falls into the prospective category. He then mentioned the Director of CQI, who was to brought in to oversee the concurrent and retrospective portions of a QA program.

During a personal interview with Ms. Keri Cook (personal communication September 20th, 2012), Cook stated that she reviews all calls that are responded to by Professional Ambulance employees and agencies that Professional Ambulance provides billing for such as the Natick Fire Department. Each call is review for accuracy and to see that company protocols have been followed. Additionally, a secondary vendor was brought in to track the usage of advance life support medications that are being given out in the field. This secondary vendor, First Watch, also receives all electronic patient care reports and then flags the ones in which medications were given to patients. First Watch then sends an e-mail to Ms. Cook, who then has immediate knowledge that medication has been used. This helps in tracking medication use and for CQI follow-up. Ms. Cook also used the words "prospective", "concurrent" and "retrospective" to describe the essential components of a quality assurance program.

During the Massachusetts Communication Supervisor Association Quality Assurance and Quality Improvement Symposium (November 8th, 2012) a discussion was led by Ms. Sherrill Ornberg who is the executive director of the North Suburban Emergency Communication Center in Des Plaines, Illinois. Ms. Ornberg discussed how quality assurance is handled in her organization. She emphasized how they rely on standardized forms to review their employee's performance. The attendee's were provided copies of forms used for performance appraisal, daily activity and also a shift supervisor evaluation form. On the daily activity sheet it was noted that there was a space

included for exceptional performance. Ms. Ornberg stated that when giving feedback the feedback should not always be in the negative fashion. Recognizing outstanding if also important in a quality assurance program.

Dr. Suzanne Wedel was asked about her thoughts on essential of a QA program (personal communication November 2nd, 2012). Dr. Wedel stated that for a program to function effectively there should be a database built using feedback in order to effect change. There is a system in place at Boston Med-Flight which allows for such feedback to be gathered. This feedback is gathered, reviewed and then changes are made to the system based on the data that was gathered.

Discussion

When looking to establish something new in any type of organization, there will be resistance to change Hammoudi (2012) talks about four pioneers in the field of quality assurance who recognized that the way their organizations were producing products could be done in a better way. Quality Assurance is something that has its roots during World War II, but in the seventy years since has spread to every manufacturer and delivery of services organization in the United States and beyond.

The idea of utilizing a four-prong approach to Quality Assurance was brought to light by Ferola (2005) when he mentioned a program being "prospective", "concurrent", "retrospective" and having a reporting and feedback element. Silimperi (2002) talked about three core quality assurance activities, those being defining quality, improving quality and measuring quality. He goes on to say that it is the synergy of all three that will facilitate sustainable improvements.

Ongoing training was an issue that was raised by Sessions (2002) who talked about what the Gainesville Florida Fire Rescue Department was doing. Their training department conducted monthly reviews of high priority issues such as cardiac arrest and trauma. This article was helpful because the emergency calls that Gainesville's training department were reviewing were the same type of calls that our Medical Control Physician was requesting for the Natick Fire Department to review. Jones (2009) reinforced the training issue by talking about how the Ministry of Health and Long-Term Care for Canada had stated that a QA program must include a continuing education or professional development section designed to promote continuing competence.

The problem of pre-conceived notions and assumptions being made about quality assurance was identified by Kresky (1986) he asserts that there is an incorrect assumption that once a skill has been obtained, the ongoing quality assurance is unnecessary. This assumption made clear that one of the essential of a QA program should be prospective which includes ongoing training.

Funding is almost always going to be an issue when start any type of new program. Questions will arise as to whose going to pay for the program and where are those funds going to come from. Evans (2012) makes the point that roughly $1 billion may become available through the U.S. Department of Health and Human Services. With this funding will come a greater emphasis on outcomes and measurable results which brings in the element of retrospective; being able to identify known problems to prevent their recurrence and the reporting and feedback element which creates a mechanism to provide data on EMS performance.

The nine steps outline in the Wisconsin EMS Medical Director Course (2012) seemed to be a bit somewhat excessive to be able to consolidate down into just a few essential components. The article did provide good insight into what other Medical Directors were looking for from their QA program. The fact that there was a QA course that had been developed specifically for Medical Directors was also interesting.

During attendance at the September 7th, 2012 meeting of Metropolitan Boston Emergency Medical Services Council Medical Control Committee meeting, the idea of essential components being "prospective", "concurrent", "retrospective" and reporting and feedback were discussed. Having seen these during literature review the idea of these become the recommendation started to become clearer.

The idea was further reinforced by B. Mergendahl (personal communication September 20th, 2012) and K. Cook (personal communication September 20th, 2012) who both agreed that the essential of the Quality Assurance program at Professional Ambulance contained the components of prospective, concurrent, retrospective and reporting and feedback.

The conversation with E. Groom, MD (personal communication September 7th, 2012) also included information which was leading the author to focus the prospective element which would provide the training element she was looking for, concurrent which would provide the real time review of action of the field paramedics and reporting and feedback which would fit into the review of defined criteria such as cardiac arrest and trauma.

During the conversation with Suzanne Wedel, MD (personal communication November 2nd, 2012) she stated that for a program to function effectively there should be

a database built using feedback in order to effect change. This fit perfectly into the element of reporting and feedback.

The Implications to the Natick Fire Department (NFD) are clear without a quality assurance program in place the department would lose the ability to operate at the advance life support level. Quality Assurance has proven to be an industry standard for many years now. Examining the way the Natick Fire Department delivers emergency medical care to the residents of the Town of Natick from a stand point of before they call for help, during the call and after the call can only prove to enhance the professionalism of the NFD.

Recommendations

The need to establish a Quality Assurance program in Town of Natick Fire Department has been made clear. As the department moves forward with developing a program the following essential components need to be incorporated into the program. The program should be prospective so that the department can look at itself to prevent future problems. The program should concurrent so that the department can perform evaluations that identify concerns during patient care. The program should be retrospective so the department can identify known problems to prevent their recurrence. Finally the program should contain a reporting and feedback so the department can provide outcome data on emergency medical service performance.

By incorporating these essential components in their Quality Assurance program, the Town of Natick Fire Department could serve as a model for other departments who are searching out the essential components of a quality assurance program. In addition, future readers of this applied research project who are searching for the essentials of a

quality assurance program are encouraged look at the components that were identified

during this applied research project.

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Medical Control Committee
September 7, 2012 8:00 AM – 10:00 AM

Natick Fire Department

Natick, MA

AGENDA

I.   Welcome   Dr. Friedman

II.   Approval of Minutes   Dr. Friedman

III.   Trauma   Dr. Setnik &

- C-Spine and Clearance   Mr. Conceison

IV.   Medication Best Practices Dose Printing   Mr. Conceison

V.   Pediatric Nasal Narcan for BLS   Mr. Conceison

VI.   Other Business

VII.   Adjourn

Frank Friedman, M.D.
Chair

Medical Control Committee
November 2, 2012 8:00 AM – 10:00 AM

Natick Fire Department

Natick, MA

AGENDA

I.	Welcome	Dr. Friedman
II.	Approval of Minutes	Dr. Friedman
III.	C-Spine and Clearance Discussion	Dr. Walter
IV.	Chempack Update	Mr. Congdon
V.	Other Business	
VI.	Adjourn	

Frank Friedman, M.D.
Chair

Mutual Aid

Intercept
❏ Given ❏ Rec'vd

Agency _____

NATICK FIRE DEPARTMENT MEDICAL TRIP SLIP

Agency _____

| CALL LOCATION: | ZIP CODE: | SHIFT 1 2 3 4 | DATE: / / | A- | INC.# |

| RECEIVING HOSPITAL: | DISPATCHED AS \ | CC | ALS / BLS / NO TRANS | LOADED MILES | DISPATCH TIME |

| NAME: | | DOB: | SS#: | | ON SCENE |

| ADDRESS: | | TELEPHONE: | | TRANSPORT |

| INSURANCE: | | RESPONDED FROM: | | AT HOSPITAL |

MEDS:

| CREW | EMT# | ALS# |

❏ ASTHMA ❏ CA ❏ CARDIAC
❏ COPD ❏ DIABETES ❏ HTN
❏ PSYCH ❏ SEIZURE ❏ CVA/TIA
❏ OTHER _____

ALLERGIES:

ACCUCHECK: _____ MG / DL

VITAL SIGNS

Time	B.P.	P.	R	SPO2	Color/Skin

PRE-HOSPITAL EMERGENCY CARE

❏ O₂ ____ LPM   ❏ E.T.T.   ❏ I.V. FLUIDS
VIA _____   ❏ SUCTION   ❏ SPINEBOARD
❏ VENTILATION   ❏ DEFIB.   ❏ C-COLLAR
❏ OPA   ❏ PACING   ❏ D-STICK
❏ NPA   ❏ SPO₂   ❏ DECOMP.
❏ CO₂   ❏ IO
❏ LABS   ❏ CRIC
❏ 12LEAD   ❏ MEDS
❏ EKG   ❏ AUTOPULSE
❏ RAD-57   ❏ ALS ASSESSMENT

EYE OPENING	PUPILS	MOTOR RESPONSES	VERBAL RESPONSE	BREATH L	SOUNDS R
__ None __ To Pain __ To Voice __ Spontaneous __ Unknown	__ Pinpoint __ Mid Range __ Dilated __ React to Light __ Unknown	__ None __ Extends __ Withdraws __ Flexes __ Obeys	__ None __ Incomprehensible __ Confused __ Oriented __ Unknown	CLR __ RAL __ WHE __ RHON __ DIM __	

TIME	EKG	O₂ / IV FLUIDS / MEDS	DOSE	ROUTE	ID#	DEFIB	RESPONSE

NARRATIVE:

IV SIZE	SITE	ID#	ATTEMPTS	ET/LMA	TIME	ID#	ATTEMPTS	❏ PATIENT DECISION CONTROL MD:	❏ AMB. DECISION
			/				/		❏ SPOKE TO MD ❏ PROTOCOL
			/				/		
			/				/	MED. CHAN. ____ ❏ CELL PHONE ❏ HOUSE PHONE	

THIS PATIENT OR AUTHORIZED REPRESENTATIVE SIGNATURE, NOW AND IN THE FUTURE, AUTHORIZES THE BILLING COMPANY TO RELEASE THIS

INFORMATION TO THE INSURANCE COMPANY AND FURTHER AUTHORIZES THE

INSURANCE COMPANY TO MAKE PAYMENT TO THE TOWN OF NATICK. _____   DATE: _____
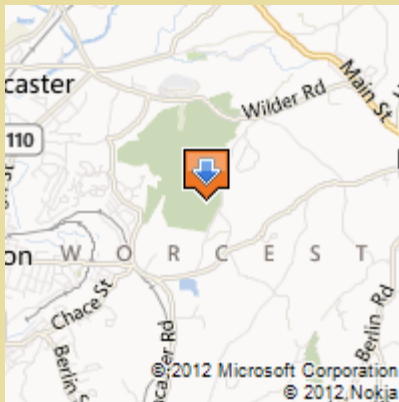
WHITE - Fire Department   YELLOW - Billing   PINK - Patient Record   HIPAA FORM ❏ Yes ❏ No   **CONTINUED ON BACK Y/N**

MCSA Quality Assurance & Quality Improvement Symposium

Where:

The International
159 Ballville Road
Bolton, MA 01740

Driving Directions

When:

Greetings!

Now that you have your EMD Program up and running are you left asking yourself now what?

MCSA Invites You to Attend
Quality Assurance ~ Quality Improvement
for the Comm Center
Thursday, November 8th
8:30 am - 4:30 pm
at The International in Bolton, MA

This is a" Day of Learning" Not to Be Missed!

Guest speaker: Sherrill Ornberg
Sherrill is the Executive Director of the North Suburban Emergency Communications Center in Illinois.
She frequently lectures locally and nationally on quality assurance, performance standards, as well as performance evaluations for line level and supervisory personnel.

Click on the link below to register.

This event has been approved by the State 911 Department

for reimbursement FY2013 Training Grant and attendees

will receive 8 hours of Continuing Dispatch Education Credits.

Get more information

Register Now!